

# Hotel Lighting the Smart Way

intelligent lighting controls for hotels



*FUTRONIX*

## Intelligent Lighting Controls for Hotels

As the international hotel industry continues to re-invent itself in keeping with the latest evolutions of lifestyle, fashion and leisure, intelligent lighting control systems increasingly offer multiple benefits to developers and operators of quality hotel projects worldwide.

These days the focus in hotel management is on attracting additional market share by appealing to a far more diverse clientele, including younger travellers and tourists interested in health and well-being.

Hotel operational lighting requirements include 'front-of-house', food-and-beverage, guest accommodation, entertainment venues, function / conference / seminar facilities, and architectural lighting.

Multi-point programming/switching and the ability to operate with all types of standard and specialised lamps – as well as operational reliability, ease of maintenance and superb product support – are of paramount importance for any system controlling lighting for an industry which never closes and is expected to provide seamless 24-hour/365-day service to a discerning clientele.



### The 'quality hotel' industry

There are many types of accommodation within the hotel industry, and their lighting needs vary, with specific requirements for different sectors.

The 'quality' hotel industry sectors for which intelligent dimming systems are applicable include:

#### **5 star+ hotels integrated into conference & seminar developments**

- these hotels will typically require highly sophisticated lighting controls covering many requirements, including:

- reception, lobby, business centres
- restaurants, lounges, bars, poolside
- guest accommodations, corridors and lobbies
- function / conference / seminar (including ballrooms), and
- interior and exterior architectural, landscape, parking and security lighting.

Most premium hotels have a pool and gymnasium equipped with fitness and strength equipment with in-built TV systems, and many now include a partially or fully featured spa within the premises.

Conference and seminar facilities include ballroom, function and breakout rooms, and dedicated conference auditoriums with theatre-style seating. These venues may require special lighting controls.

#### **free-standing hotels of 4-5 star or higher rating**

- will typically have some or most of the above lighting control requirements, including ballroom, function rooms, plus conference and seminar specifications. Many will have excellent spa and health club facilities, and will derive much of their revenue from upscale F&B outlets catering to city locals as well as guests.



#### **boutique and all-suite hotels**

- will always focus, above all, on providing the finest in personal comfort and convenience in guestrooms and services, along with several fine dining venues. There are usually public area, restaurant and in-room lighting controls.

#### **resort hotels**

- formerly only at tourist destinations, resort hotels are now also found in inner cities. Rest and relaxation is usually the main attraction, with room comfort, cuisine and guest activity programs being important. Resort hotels range from intimate hideaways to vast complexes featuring comprehensive conference and seminar facilities, and will often offer a mixture of hotel and bungalow-style rooms, along with health club and spa facilities. Lighting needs are geared to this clientele.

#### **spa resorts**

- spa resort hotels are dedicated to providing a peaceful atmosphere, massage and other therapies, and fitness programs as well as healthy cuisines – usually in a ‘garden/pool’ setting. Free-standing bungalows with space and privacy are typical for spa resorts, although some feature low-rise suite accommodations. Natural, subtly atmospheric lighting is an essential element throughout these hotels.

### **Lighting hotels – the smart way!**

Intelligent lighting control systems are becoming standard in the hotel industry where guest comforts and services are essential. An intelligent lighting control system, correctly specified, installed and maintained, provides programmable control of all exterior and interior lighting, and creates an atmosphere which attracts repeat guests for dining, entertainment and accommodation.



The recommended solution for quality hotels is installation of a complete-building lighting control system for controlling lights in all public and commercial areas, augmented by stand-alone or networked dimmers in guest rooms.

Futronix manufactures one of the world’s most advanced intelligent lighting control systems – the Futronix **PFX System**.

The PFX System, an unlimited channel lighting control & whole-building automation system, is a modular system of linked dimmer racks and switch panels installed throughout the hotel.

Fully-digital PFX Systems of unlimited size and complexity are accurate, quiet in operation and highly reliable. They can interface with security and alarm systems, and can operate with other programmable building automation features – including curtains and shades.

The PFX System features true 'scene dimming' in all rooms or areas, and a comprehensive list of features and options unrivalled by competing systems. A range of accessories adds functionality in specific areas.

With '**scene dimming**', area lighting can be effortlessly transformed for ambient or mood lighting, architectural illumination, guest room lighting variations, and lighting public areas such as lobbies, corridors and balconies. Futronix systems feature true 'scene dimming' – as against simple ON/OFF controls or manual faders – with dimming software ensuring smooth transitions between scenes.

All system operations can be performed centrally from a linked PC and/or Futronix Home-Icon HI-C Colour TouchScreen controller, or from a remote control handset or wall-mounted switch panels.



Futronix switchplates, combining multiplex functionality with simple elegance, are available for Futronix commercial and light commercial dimmers. They provide multi-location switching to select scenes in different rooms or areas.



Most types of lighting can be controlled by the standard PFX System, including continuous tungsten, low voltage, halogen, neon/cold cathode, and fluorescent (high frequency). A comprehensive range of accessories and options further enhances the capability of Futronix dimmers.

### Intelligent lighting control – the smart solution!

Intelligent lighting control systems from Futronix provide more than just centralized control of unlimited-channel lighting throughout a hotel. Futronix accessories are designed to customize selected channels to allow specialised features for specific purposes and areas.

#### Lighting exteriors and interiors

Exterior hotel lighting will typically – for most quality hotels - include exterior architectural and landscape lighting, water and garden features, exterior signage, and main entrance illumination, as well as parking, security and emergency lighting.

With the **PFX System**, subtle variations of ambiance can be programmed with auto-sequencing to highlight specific features or areas.

For switching heavy-duty exterior lighting Futronix supply the **PFR** unit, and the **PFS** unit is designed for controlling large-scale curtains, blinds and sunscreens in atriums and lobbies.

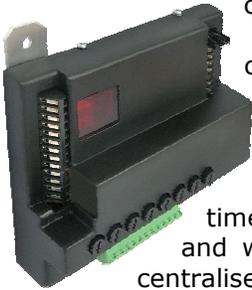
Dramatic architectural lighting effects are easily achieved using the **Futronix LD** – a special accessory unit for dimming LED lighting. Currently spotlights composed of clusters of ultra-bright white LED's are highly popular.



Usually installed as uplights and downlights for atmospheric exterior and interior lighting, they are also ideal for backlighting translucent panels.



The **Futronix Hx Controller** provides a flexible solution for guestroom/suite lighting control, either free-standing or networked to the BMS (Building Management System). The Hx Controller is a remotely mounted dimmer with 8 channels of dimming and switching. The modular design allows for networking multiple units, and provides for multi-point switching control. Designed for mounting in the overhead ceiling cavity or other electrical void, the Hx unit will connect to other equipment including switchpanels and a PC.



The Hx also incorporates 4 channels of 1-10V dimming, 7-day/24-hour timer, hard switching inputs from a normal light switch, occupancy inputs, and wall switchplates featuring a display with IR receiver. For in-room or centralised control via an intuitive graphical interface, a Home-Icon Color TouchScreen Controller can connect directly to Hx dimmers.

### Interior lighting

Interior lighting will usually include lighting for main lobby, atrium, corridors and guest lounges, guest room and suite lighting, plus specialised lighting for food & beverage outlets. Also standard is lighting for function and pre-function rooms, and ballrooms.



Fluorescent lighting is often specified for ceiling coffers or under counters in hotel lobbies, reception counters, restaurant and entertainment areas, and bathrooms.

Industry standard fluorescent dimming is available with the Futronix **1-10v fluorescent dimming controller**.

Increasingly popular for hotel public area lighting is **3-color cold-cathode neon lighting**, controlled directly from an **NC30 Neon Controller** linked to a PFX dimmer. A **4-color cold-cathode neon controller** can offer a superior option for lighting coffers & recesses, with the addition of warm white to specifically selected shades of red/green/blue, which together provide more subtle fades and gradations than standard RGB.



Especially useful for **lobbies, atriums and restaurants**, Futronix supply the **DMX Controller** which can control several of the available channels with output

to lamps. In hotels the most usual application for the DMX controller is interior and exterior architectural and atmospheric lighting. Although white is the most popular colour these days, the DMX controller can provide extremely subtle colour lighting washes. Also functional in lobbies and atriums is the Futronix **Photo Cellswitch** which triggers opening and closing of sunshades and drapes, or other events, according to detected ambient light.

In **guestrooms**, all lounge, bedroom and bathroom lighting for suites and guestrooms throughout a hotel can be controlled by individual or networked Hx Controller units. Bedrooms usually feature dedicated control switchpanels at both sides of the beds, offering convenient one-touch control.



**Restaurants, lounges, bars and clubs** in a hotel can generally be lit – subtly or dramatically – with the PFX System plus accessories already mentioned, although discos and large bar/club venues are typically operated independently as leased areas, with only house lighting incorporated into hotel lighting control systems.



A hotel-wide PFX System can control lamps of all kinds, and – using the same accessories – be programmed to light **Fitness & Health** clubs, **spa**, therapy rooms, poolside and other facilities.



**Functions, conferences and seminars** are daily activities in most hotels, and these also have special lighting requirements. **PIR** Movement Detectors are useful accessories in conference rooms to conserve energy when rooms are set up, then left empty for long periods before a meeting or presentation.

**Hotel ballrooms** provide venues for a wide variety of events. Lighting requirements for ballrooms typically include pre-function lobby lighting, and lighting controls for dimming different lights for cocktail events, seated dining, theatrical and musical entertainments and weddings, as well as conferences and seminars.

Multi-purpose lighting flexibility is made possible by partitioning large ballrooms into smaller function rooms, and an intelligent lighting control system is recommended to allow comprehensive pre-set lighting environments for all of the resultant



combinations of spaces and utilisation. With the appropriate accessories, sound systems and motorized elements such as curtains can be linked into PFX lighting control systems in various configurations to provide seamless control.

### Spa Resorts – a distinctive style of hotel needs specialised lighting controls

Spa resort hotels, distinctively among quality hotels, consist of single or duplex bungalow-style suites sited around a cluster of main buildings housing reception, restaurant, and other functions. Increasingly, Futronix top-of-range residential **P400** and **P800 dimmers** are proving ideal for providing localized lighting control in such bungalow-style suites.



These dimmer units have all control and dimming functions built into the one module, plus an integral timer. They offer 20 programmable scene settings, and provide multi-zone localised control with multi-point switching with the same ease and flexibility as the PFX or Envirosce Systems installed in a resort's main buildings.

P400 and P800 dimmer units feature an in-built timer that can be programmed for up to 70 scene changes per week, including security settings at night. They can also control fluorescent tubes dimmed using Futronix' 0-10v ballast controller option – perfect for bathrooms and kitchenettes in a free-standing bungalow.



With these dimmers hotel staff or guests can simply and easily select or set up lighting environments as desired – highlighted, diffused, fading, filtered or subtle – to enhance the spa atmosphere and mood. When a new scene is selected, just as in nature, lights will gently fade creating a subtle transition. Guests can enjoy the convenience of being able to program and/or select lighting scenes from the comfort of their chair or bed using the remote control handset.

For spas with 'new age' colour therapy lighting, the Futronix **Neon Controller** is ideal for creating extremely subtle colour gradations - continually varying imperceptibly - as lighting washes for walls, pool lighting and other features.



The Futronix **Envirosce** multi-channel controller is ideal for lighting control for restaurants, bars, conference and seminar rooms, and other light commercial applications typical to a smaller resort hotel or spa resort.



Futronix P400/P800 dimmers, Hx dimmers, and Envirosce and PFX switch-panel outstations are visually designed to complement each other in a range of styles and finishes, so PFX and stand-alone dimmers can be installed in the same hotel.

For superior guest service, a Futronix **Reception Controller** located near the Reception desk – linked to **Hx dimmers** controlling lighting in individual bungalows – means reception staff are able to turn on lights, open or close drapes, and activate other welcoming features before guests arrive at their bungalow.



### Management, control & security

Futronix PFX Systems provide solutions for all hotel lighting management challenges. With PFX units installed out of sight in an electrical control room(s), the equipment, wiring and accessory components can be arranged for easy cabling, installation, programming, inspection and maintenance. PFX Systems are fully compatible both backwards & forwards, so an investment in a dimming system will retain its value over the years, with maintenance, service and spare parts always available.



The engineer/manager can program and monitor all operations from a centrally-located PC or a Futronix Home-Icon HI-C Colour TouchScreen controller in his office, or from a remote handset or laptop computer throughout the building. A PC computer is typically used for engineering and maintenance functions, while an optional HI-C touch screen is preferred for intuitive visual accessibility for programming and operation.

PFX System lighting controls monitored from a central location also enhance guest **security** - a major concern for all hotels – with entrance and occupancy detection, security and perimeter lighting subject to automated commands, and emergency lighting linked to installed hotel BMS systems.

### Controlling PFX Systems with Home-Icon HI-C Color TouchScreen Controller

The Home-Icon HI-C Colour Touch Screen controller offers an enhanced control option for hotels, allowing sophisticated remote control of PFX, Envirosce and Hx dimmers and other automation systems. The HI-C TouchScreen links dimmers together, and can add multiple functions with one-touch macros programmed to run pre-set 'environments' for hotel-wide ambient lighting control.

The Home Icon HI-C can also provide the hotel manager and engineer with master automation control for an entire hotel, with an in-built 365-day astronomical timer to program lighting for special events and holidays far in advance, and the ability to control AV equipment and security alarms.

The Home-Icon HI-C commercial lighting controller features a full colour TFT touch-screen display, with graphics representing building layout, system components, performance circuit levels & other programmable settings in a clear and logical user-friendly format. The controller can re-program lighting scenes, raise and lower lighting circuit levels and save system changes.



For large hotel installations, the touch screen display is usually located in the operational manager's office or a separate control/distribution room. In bungalow or spa resorts where free-standing control is desired, HI-C Touch Screens are

typically fitted by entrance doors, with switch panels in other rooms or areas to provide multi-point local switching control.

### **Partitioning for large spaces**

Of particular interest to hotel management is maximising the efficiency of ballrooms and function rooms by arranging scheduling and space utilisation of these costly rooms. Partitioning of large rooms allows various functions to take place simultaneously in one area divided into smaller function rooms, each with its' own control room.



Futronix PFX dimmer racks for partitioned ballrooms are typically located in separate Distribution Board rooms, with input from switchplates located in the rooms and service areas. Automatic or manually-controlled partition position switches, installed on the wall near each partition, control lighting for each smaller area or combination of areas as though it was one room, with full scene setting capability.

The PFX System's X-BUS protocol allows all power and data to be sent down a single multi-stranded cable, daisy-chained to each control switch plate in turn. This useful feature for lighting control for large pillarless areas such as ballrooms requires significantly less cabling and installation, and provides greater reliability due to fewer components and connections, easier terminations and more robust cable.

### **Intelligent lighting transcends the trends in quality hotels**

Whether a hotel is located in a city or on a remote island, high-rise or low-rise, targeting primarily business travellers or leisure visitors . . . with appropriate intelligent lighting control systems installed, quality hotels of all types and sizes can enjoy the profitable benefits of more appealing lighting and ambiance combined with simplicity and reliability.